CLAIMS

1. A method for producing a metal sheet, in particular a steel sheet, wherein at least one surface of the metal sheet is provided with a surface structure which comprises structural elements in the form of depressions and/or elevations, wherein the surface structure is in the form of an unordered microstructure.

2. A method in accordance with Claim 1, wherein the structural elements of the microstructure have an average diameter of less than 0.5 mm, preferably of less than 0.3 mm.

3. A method in accordance with Claim 1, wherein the structural elements of the microstructure on the surface of the metal sheet are in the form of elevations having a maximum height of less than approximately 0.1 mm.

4. A method in accordance with Claim 1, wherein at least a part of the structural elements of the microstructure on the surface of the metal sheet are in the form of depressions having a maximum depth of less than approximately 0.1 mm.

5. A method in accordance with Claim 1, wherein the microstructure is formed on the surface of the metal sheet by an embossing process, in particular, by means of an embossing roller.

6. A method in accordance with Claim 1, wherein in at least one longitudinal direction of the metal sheet, the microstructure has a periodic length which is greater than ten times, and is preferably greater than one hundred times, the average diameter of the structural elements of the microstructure.

7. A method in accordance with Claim 1, wherein the microstructure comprises at least two types of structural elements which differ from one another in regard to the outlines thereof.

8. A method in accordance with Claim 1, wherein the microstructure comprises structural elements having irregularly formed outlines.

9. A method in accordance with Claim 1, wherein the structural elements of the microstructure are distributed irregularly over the surface of the metal sheet.

10. A method in accordance with Claim 9, wherein there is a spread in the distances between the centre points of the outlines of mutually adjacent structural elements.

11. A method in accordance with Claim 1, wherein there is a spread in the angles which the connecting lines interconnecting the centre points of the outlines of mutually adjacent structural elements include with a given longitudinal direction of the metal sheet.

12. A method in accordance with Claim 11, wherein the angles, which the connecting lines interconnecting the centre points of the outlines of mutually adjacent structural elements include with a given longitudinal direction of the metal sheet, are distributed substantially uniformly over the angular range from 0° to 360°.

13. A method in accordance with Claim 1, wherein at least a part of the structural elements is not rotationally symmetrical, and in that there is a spread in the orientations of these structural elements relative to a given longitudinal direction of the metal sheet.

14. A method in accordance with Claim 13, wherein the orientations of the non-rotationally symmetrical structural elements with respect to the given longitudinal direction of the metal sheet are distributed substantially uniformly over the angular range from 0° to 360°.

15. A method in accordance with Claim 1, wherein the centre points of the outlines of the structural elements form a pattern which has a periodic length in at least one longitudinal direction of the metal sheet that is greater than ten times, and is preferably greater than one hundred times, the average diameter of the structural elements of the microstructure.

16. A method in accordance with Claim 1, wherein the microstructure is substantially isotropic.

17. A metal sheet, and in particular a steel sheet, which is provided with a surface structure on at least one of the surfaces thereof, said surface structure comprising structural elements in the form of depressions and/or elevations, wherein the surface structure is in the form of an unordered microstructure.

18. A metal sheet in accordance with Claim 17, wherein the structural elements of the microstructure have an average diameter of less than 0.5 mm, and preferably of less than 0.3 mm.

19. A metal sheet in accordance with Claim 17, wherein at least a part of the structural elements of the microstructure on the surface of the steel sheet are in the form of elevations having a maximum height of less than approximately 0.1 mm.

20. A metal sheet in accordance with Claim 17, wherein at least a part of the structural elements of the microstructure on the surface of the metal sheet are in the form of depressions having a maximum depth of less than approximately 0.1 mm.

21. A metal sheet in accordance with Claim 17, wherein the microstructure was produced on the surface of the metal sheet by an embossing process, in particular, by means of an embossing roller.

22. A metal sheet in accordance with Claim 17, wherein in at least one longitudinal direction of the metal sheet, the microstructure has a periodic length which is greater than ten times, and is preferably greater than one hundred times, the average diameter of the structural elements of the microstructure.

23. A metal sheet in accordance with Claim 17, wherein the microstructure comprises at least two types of structural elements which differ from one another in regard to the outlines thereof.

24. A metal sheet in accordance with Claim 17, wherein the microstructure comprises structural elements having irregularly formed outlines.

25. A metal sheet in accordance with Claim 17, wherein the structural elements of the microstructure are distributed irregularly over the surface of the metal sheet.

26. A metal sheet in accordance with Claim 25, wherein there is a spread in the distances between the centre points of the outlines of mutually adjacent structural elements.

27. A metal sheet in accordance with Claim 17, wherein there is a spread in the angles which the connecting lines interconnecting the centre points of the outlines of mutually adjacent structural elements include with a given longitudinal direction of the metal sheet.

28. A metal sheet in accordance with Claim 27, wherein the angles, which the connecting lines interconnecting the centre points of the outlines of mutually adjacent structural elements include with a given longitudinal direction of the metal sheet, are distributed substantially uniformly over the angular range from 0° to 360°.

29. A metal sheet in accordance with Claim 17, wherein at least a part of the structural elements is not rotationally symmetric, and in that there is a spread in the orientations of these structural elements relative to a given longitudinal direction of the metal sheet.

30. A metal sheet in accordance with Claim 29, wherein the orientations of the non-rotationally symmetrical structural elements with respect to the given longitudinal direction of the metal sheet are distributed substantially uniformly over the angular range from 0° to 360°.

31. A metal sheet in accordance with Claim 17, wherein the centre points of the outlines of the structural elements form a pattern which has a periodic length in at least one longitudinal direction of the metal sheet that is greater than ten times, and is preferably greater than one hundred times, the average diameter of the structural elements of the microstructure.

32. A metal sheet in accordance with Claim 17, wherein the microstructure is substantially isotropic.

33. A shaped part which is formed from a metal sheet in accordance with Claim 17 by one or more reshaping processes, in particular, by an embossing and/or a deep-drawing process.

34. A shaped part in accordance with Claim 33, wherein the shaped part forms a component of a sink top or a mixer tap.

35. A shaped part in accordance with Claim 33, wherein the shaped part forms a component of a work top.

36. A device for structuring the surface of a metal sheet, comprising an embossing element, and in particular an embossing roller, whose surface is provided with a surface structure incorporating structural elements in the form of depressions and/or elevations, wherein the surface structure of the embossing element is in the form of an unordered microstructure.

37. A device in accordance with Claim 36, wherein the microstructure is etched into the surface of the embossing element.

38. A device in accordance with Claim 36, wherein the microstructure is engraved into the surface of the embossing element.

39. A device in accordance with Claim 36, wherein the embossing element is provided with a wear-protection layer consisting of chrome, TiN and/or TiC for example.